

**Notice of Allowability**

Application No.

10/816,474

Applicant(s)

SEPULVEDA, MIGUEL A.

Examiner

Said Broome

Art Unit

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 4/25/07.
2. ☒ The allowed claim(s) is/are 1-93.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to an amendment filed on 4/25/2007.
2. Claims 1 and 36 have been amended by the applicant.
3. Claims 2-35 and 37-93 are original.

***Drawings***

The drawings were received on 3/16/07. These drawings are accepted.

***Allowable Subject Matter***

Claims 1-93 are allowed. The following is an examiner's statement of reasons for allowance:

The prior art, Milliron (US Patent 6,608,631) and Silva (US Patent 6,061,067), do not teach the limitations of claims 1, 36 and 65. Milliron teaches an animation deformation pipeline in Figure 7A as recited in claim 1, a method for deforming a computer-generated object in column 2 lines 52-53 as recited in claim 36, and a computer program product for deforming a computer-generated object using inherently using a graphics hardware or deformation pipeline in column 10 lines 11-14 comprising a computer-readable medium and computer program code, encoded on the medium in column 2 lines 44-48, as recited in claim 65. Milliron teaches converting a geometric representation of an object into a data stream in column 2 lines 51-55, as illustrated in Figure 7A as element 7150, receiving the data and applying a deformation to the data stream in column 2 lines 55-59 as illustrated in Figure 7A as element 7750, and converting

the deformed data into a geometric representation of a deformed object in column 3 lines 7-9, as illustrated in Figure 7A as element 7850. However, Milliron fails to specifically teach a head node, a plurality of deformation nodes and a tail node. Silva illustrates a head node 210 in Figure 2 that converts a geometric representation of an object as described in column 11 lines 54-55 that is sent to the pipeline 250 through a data stream, and also teaches a plurality of deformation nodes in column 4 lines 60-67, which are described to perform deformation on the 3D object, and is also illustrated in Figure 1. Silva teaches a deformation or transformation node 230 that receives data from a node and applies deformation to the data as described in column 11 lines 11-21, and a tail node 270 that converts the deformed data into a geometric representation of a deformed or transformed object as described in column 11 lines 48-53 and 63-66. However, none of the prior art teaches or suggests passing topology information describing the topology makeup of the geometry encoded in the data stream through the plurality of deformation nodes separate from the data stream without altering the topology information, as recited in claims 1, 36 and 65. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

Due to the corrected status of claim 65, the claim is now in compliant amendment form.

The 35 U.S.C. 101 rejection of claims 1-64 have been withdrawn due to the amendments to claims 1 and 36, which now recite statutory subject matter, therefore claims 1-93 are allowable.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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*/Said Broome/*

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7/2/07

A handwritten signature in black ink, consisting of a large, stylized 'K' followed by a series of loops and a long, sweeping horizontal stroke.

KEE M. TUNG  
SUPERVISORY PATENT EXAMINER